Appendix J-6

SOP: Compliance With Air Emission Regulations for Containers

I Introduction

This standard operating procedure (SOP) applies to the management of hazardous waste with volatile organic (VO) concentration greater than 500 ppmw at the point of waste generation in containers at SCYI's RCRA Hazardous Waste Storage Area and at all areas at which containers of hazardous waste are stored for periods less than 90 days.

II Responsibility

Implementation of this SOP is the responsibility of all SCYI management, operations and maintenance personnel involved in the generation, packaging, storage, and shipping of hazardous waste in containers. Determinations regarding the applicability of this SOP to particular containers, including VO concentration and vapor pressure of wastes are the responsibility of the SCYI Environmental Engineering Group.

III Operating Procedure

A. Container capacity less than 119 gallons (Level 1 Containers)

Containers with a design capacity of less than 119 gallons (0.46 m^3) will be operated as Level 1 containers as follows. These containers include, but are not limited to, 26 gallon drums, 55 gallon drums, lab packs and overpacked 85 gallons drums.

a. All containers holding hazardous waste will be in good condition. If the container is not in a good condition (severe rusting, apparent structural damage such as hole, tear, gap or deformation, etc) or the container shows evidence of a potential leak, the hazardous waste will be transferred to a container in good condition.

b. All containers and liners will be made of material which is compatible with the hazardous waste to be stored in them so that the ability of the container to hold waste is not impaired.

c. Covers and closure devices on containers will be composed of suitable materials to minimize exposure of hazardous waste to the atmosphere and to maintain equipment integrity for its service life. Material selection for covers and closure devices will be based on organic vapor permeability; effects of contact with hazardous waste or its vapors; effects of wind, moisture, sunlight and other outdoor agents; and the operating practices of the container's intended usage.

d. Containers filled with hazardous waste will be handled and stored with care so as to prevent ruptures, leaks or spills.

e. Containers holding ignitable or reactive waste will be stored at least 50 feet from the facility's property line.

f. Covers and closure devices may be separately installed on the container or may be an integral part of the container. A separately installed cover and closure device consists of a removable lid fastened on a removable head drum with a locking ring tightened by a bolt or toggle lever. A structurally integral cover consists of a cover that is a part of the structural design of the container and is equipped with a threaded opening and a screw-type closure device or a hatch with a gasketed cover bolted to the rim. SCYI does not utilize organic vapor suppressing barriers (such as foam) as covers on open containers.

g. All containers will be equipped with a cover and closure devices that form a continuous barrier over the container such that there are no visible holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position.

h. Covers and closure devices for the containers will be secured and maintained in a closed position at all times, except for the purposes of adding and removing hazardous waste and to perform routine activities such as measuring the depth of waste, sampling of waste, access equipment in the container, etc. Following the completion of routine activity, all closure devices will be secured in a closed position or the cover will be reinstalled.

i. Adding hazardous waste to the container will be performed in accordance with the following procedures:

(1) If the container is filled to its intended final level in one continuous operation, the cover and closure devices will be installed and promptly secured in a closed position over the container.

(2) If the container is filled in discrete quantities or in batches over time, the cover and closure devices will be installed and promptly secured in a closed position over the container, if

- no additional hazardous waste is added to the container within 15 minutes; or

- the person performing the loading operation has to leave the immediate vicinity of the container; or

- a shutdown of the process generating the hazardous waste being added to the container; or
- the container is filled to its intended final level;

whichever occurs first.

j. Covers and closure devices are not required to be secured in a closed position on an empty container (i.e., the container may be open to the atmosphere at any time when the container is empty). A container is empty if it meets the following conditions:

(1) All waste has been removed that can be removed using practices commonly employed to remove material from the each specific type of container; and

(2) A maximum of 2.5 centimeters (1 inch) of residue remaining on the bottom of the container or inner lining, or

A maximum residue of 3% by weight of the total capacity of the container remains in the container or the inner liner, for containers less than or equal to 110 gallons in size, or

A maximum residue of 0.3% by weight of the total capacity of the container remains in the container or the inner liner, for containers greater than 110 gallons in size.

The above conditions do not apply to containers holding compressed gas or acute hazardous wastes. However, SCYI does not manage containers holding compressed gas or acute hazardous wastes at the Hazardous Waste Storage Area.

k. Transfer of hazardous waste from a container which does not meet the description in (j) above into an empty container will be performed in accordance with the following procedures:

(1) If the container is emptied in discrete quantities or in batches over time, the cover and closure devices will be installed and promptly secured in a closed position over the container, if

- no additional hazardous waste is removed from the container within 15 minutes; or

- the person performing the unloading operation has to leave the immediate vicinity of the container;

whichever occurs first.

l. Venting of vapors to the atmosphere through a pressure relief device such as a pressure-vacuum relief valve, conservation vent or similar type of device, is allowed during normal operations for the purposes of maintaining the internal pressure of the container in accordance with design specifications. Examples of normal operation include loading operations and diurnal ambient temperature changes. The pressure relief device will remain in a closed position whenever the internal pressure of the container is within the internal pressure operating range based on manufacturer's recommendation, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of hazardous waste.

m. Safety devices on containers are allowed to open at any time provided that conditions require doing so avoid unsafe condition. Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation of the container by venting vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event.

B. Container capacity greater than 119 gallons

Containers with a design capacity of greater than 119 gallons (0.46 m^3) will be operated as described in this section. These containers include, but are not limited to, roll-off bins, bulk storage containers, etc. It is presumed that containers with capacity greater than 119 gallons are in light material service, unless documentation demonstrating otherwise is maintained in the operating record in accordance with Section V.A of this SOP.

1. Containers in Light Material Service:

Containers in light material service will be managed as Level 2 containers as follows.

a. All containers and liners will be made of material which is compatible with the hazardous waste to be stored in them so that the ability of the container to hold waste is not impaired.

b. Covers and closure devices on containers will be composed of suitable materials to minimize exposure of hazardous waste to the atmosphere and to maintain equipment integrity for its service life. Material selection for covers and closure devices will be based on organic vapor permeability; effects of contact with hazardous waste or its vapors; effects of wind, moisture, sunlight and other outdoor agents; and the operating practices of the container's intended usage.

c. Covers and closure devices may be separately installed on the container or may be an integral part of the container. An example of separately installed cover and closure device is a suitably secure tarp on a roll-off bin. Examples of a structurally integral cover to a container include roll-off containers equipped with one piece metal lid or over/under two piece metal lid.

d. All containers will be operated with no detectable emissions as determined in accordance with the following procedure:

   (1) Each potential location where organic vapor leakage could occur (i.e., leak interface) on the container, its cover and associated closure devices, as applicable to the container, will be checked in accordance with procedures specified in Method 21 of 40 CFR Part 60, Appendix A.

   (2) Potential leak interfaces include, but are not limited to, the interface between the cover rim and the container wall; the periphery of any opening on the container cover and its associated closure device; and sealing seat interface on a spring-loaded pressure-relief valve.

   (3) The test will be performed when the container is filled with hazardous waste that is representative of the range of volatile organic concentrations expected to be managed in the container. During the test, the container cover and closure devices will be secured in the closed position.

e. Covers and closure devices for the containers, as applicable to the container, will be secured and maintained in a closed position at all times, except for the purposes of adding and removing hazardous waste; and to perform routine activities such as measuring the depth of waste, sampling of waste, access equipment in the container, etc. Following the completion of routine activity, all closure devices will be secured in a closed position or the cover will be reinstalled.

f. Adding and removing of hazardous waste from the container will be conducted such that exposure of hazardous waste to the atmosphere is minimized to the extent practical based on physical and chemical condition of waste and good engineering practices.

g. Adding hazardous waste to the container will be performed in accordance with the following procedures:

(1) If the container is filled to its intended final level in one continuous operation, the cover and closure devices will be installed and promptly secured in a closed position over the container.

(2) If the container is filled in discrete quantities or in batches over time, the cover and closure devices will be installed and promptly secured in a closed position over the container, if

- no additional hazardous waste is added to the container within 15 minutes; or
- the person performing the loading operation has to leave the immediate vicinity of the container; or
- a shutdown of the process generating the hazardous waste being added to the container; or
- the container is filled to its intended final level;

whichever occurs first.

h. Covers and closure devices are not required to be secured in a closed position on an empty container (i.e., the container may be open to the atmosphere at any time when the container is empty). A container is empty if it meets the following conditions:

(1) All waste has been removed that can be removed using practices commonly employed to remove material from the each specific type of container; and

(2) A maximum of 2.5 centimeters (1 inch) of residue on the bottom of the container or inner lining; or

A maximum residue of 3% by weight of the total capacity of the container

remains in the container or the inner liner, for containers less than or equal to 110 gallons in size; or

A maximum residue of 0.3% by weight of the total capacity of the container remains in the container or the inner liner, for containers greater than 110 gallons in size.

The above conditions do not apply to containers holding compressed gas or acute hazardous wastes. However, SCYI does not manage containers holding compressed gas or acute hazardous wastes at the Hazardous Waste Storage Area.

i. Transfer of hazardous waste from a container which does not meet the description in (h) above into an empty container will be performed in accordance with the following procedures:

(1) If the container is emptied in discrete quantities or in batches over time, the cover and closure devices will be installed and promptly secured in a closed position over the container, if

- no additional hazardous waste is removed from the container within 15 minutes; or
- the person performing the unloading operation has to leave the immediate vicinity of the container;

whichever occurs first.

j. Venting of vapors to the atmosphere through a pressure relief device such as pressure-vacuum relief valve, conservation vent or similar type of device, is allowed during normal operations for the purposes of maintaining the internal pressure of the container in accordance with design specifications. Examples of normal operation include loading operations and diurnal ambient temperature changes. The pressure relief device will remain in a closed position whenever the internal pressure of the container is within the internal pressure operating range based on manufacturer's recommendation, applicable regulations, fire protection and prevention codes, standard engineering codes and practices, or other requirements for the safe handling of hazardous waste.

k. Safety devices on containers are allowed to open at any time provided that conditions require doing so avoid unsafe condition. Safety device means a

closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation of the container by venting vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event.

2. Containers **not** in Light Material Service

Containers not in light material service will be operated in accordance with Section III.A of this SOP.

IV Inspection and Repair Procedure

A. Inspection

1. Every container storage area at the facility will be inspected daily when in use and weekly when not in use for leaking containers, deteriorating containers and containment systems, minimum aisle space, and maintenance of minimum distance (50 feet) from the property line for containers holding ignitable or reactive waste.

2. Prior to placing hazardous waste in a container, the container will be inspected to determine if the container is empty as defined in III.A.(j) of this SOP. If the container does not meet the conditions for an empty container, the container will be emptied within 24 hours after the container is accepted at the facility. If the container cannot be emptied within 24 hours, a visual inspection will be conducted to check for visible cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If the defect is detected, repair will be initiated in accordance with the Repair procedures [IV.B] below.

3. If a container used for managing hazardous waste is at the facility for a period of 1 year or more, then the container including its cover and closure device will be visually inspected initially and thereafter on an annual basis, for visible cracks, holes, gaps, or other open spaces into the interior of the container when the cover and closure devices are secured in the closed position. If the defect is detected, repair will be initiated in accordance with the Repair procedures [IV.B] below.

B. Repair

1. When a defect is detected for a container, cover, or closure devices, the first attempt at repair will be made within 24 hours from the detection of the defect. The

repair will be completed as soon as possible but no later than 5 calendar days after the defected is detected. If the repair cannot be completed within 5 calendar days, the hazardous waste will be removed from the container, and the container will not be used until the defect in repaired. Repair log for containers presented in Table 1 will be completed if a defect is detected.

V Recordkeeping

A. For non-DOT containers managing hazardous waste with capacity greater than or equal to 119 gallons and not in light material service, records showing procedures used to determine that the containers managing hazardous waste are not in light material service will be maintained in the operating record. Records will include, at a minimum, a sampling and analysis plan and analytical results in accordance with 40 CFR 264.1083(c)(2) and 265.1084(c)(2).

B. Container inspection and repair logs will be maintained in the operating record.

SHELL CHEMICAL YABUCOA, INC.
YABUCOA, PUERTO RICO

Hazardous Waste Storage Container - Visual Inspection Log

Container ID	Date of Inspection	Defect [1] Detected [YES/NO]	Type of Defect	Date of First Attempt at Repair [2]	Date of Final Repair [3]	Delay in Repair [4] [YES/NO]	Hazardous Waste Removed from the Container [YES/NO]	Date of Hazardous Waste Removal from the Container	Signature of Operator/Inspector

[1] A visual observation of cracks, holes, gaps or other open spaces into the interior of the container when the cover and closure device is secured in a closed position constitutes a defect.

[2] First attempt to repair the defect must be within 24 hours from detection of defect.

[3] Final date of repair will be no later than 5 calendar days after dectection of de.fect.

[4] Delay in Repair occurs when the repair cannot be completed within 5 calendar days after detection.